

Advances in Virus Research—Volume 79

Research Advances in Rabies

Edited by

Alan C. Jackson

Cover illustration: CVS-infection, but not mock-infection, induces formation of 4-hydroxy-2-nonenal (4-HNE) - labeled axonal swellings. Fluorescence microscopy showing mock- (A, C, and E) and CVS- (B, D, and F) infected DRG neurons at 72 h p.i. β -tubulin (A and B) is a marker of DRG neuronal cell bodies and axons (red) and expression of β -tubulin in CVS-infected neurons (B) showed multiple axonal swellings, but a lack of axonal swellings in mock-infected neurons (A). 4-HNE (green) was poorly expressed in the axons of mock-infected DRG neurons (C), but showed greater expression in the axons of CVS-infected neurons (D) and showed accumulation in regions with axonal swellings (D). In CVS-infected neurons, merging of signals for β -tubulin and 4-HNE (yellow) showed there was strong expression of these elements in axons, both with axonal swellings (arrowheads) and without axonal swellings (arrow) (F), but not in mock-infected neurons (E). Reproduced with permission from Jackson et al. in *Journal of Virology* 84:4697–4705, 2010.

Contents

Rabies Virus Transcription and Replication

Aurélien A. V. Albertin, Rob W. H. Ruigrok, and Danielle Blondel

Rabies Virus Assembly and Budding

Atsushi Okumura and Ronald N. Harp

Evasive Strategies in Rabies Virus Infection

Monique Lafon

Rabies Virus Clearance from the Central Nervous System

D. Craig Hooper, Anirban Roy, Darryll A. Barkhouse, Jianwei Li, and Rhonda B. Kean

Role of Chemokines in Rabies Pathogenesis and Protection

Xuefeng Niu, Huafei Weng, and Zhen F. Fu

Interferon in Rabies Virus Infection

Martina Rieder and Karl-Klaus Conzelmann

The Role of Toll-Like Receptors in the Induction of Immune Responses During Rabies Virus Infection

Jianwei Li, Milosz Faber, Bernhard Dietzschold, and D. Craig Hooper

Role of Oxidative Stress in Rabies Virus Infection

Alan C. Jackson, Wala Kammoos, and Paul Farnyough

Rabies Virus as a Research Tool and Viral Vaccine Vector

Emily A. Gomme, Celestine N. Wanjalla, Christoph Wirblich, and Matthias J. Schnell

Rabies Virus as a Transneuronal Tracer of Neuronal Connections

Gabriella Ugolini

Molecular Phylogenetics of the Lyssaviruses—Insights from a Coalescent Approach

Susan A. Nadin-Davis and Leslie A. Real

Bats and Lyssaviruses

Ashley C. Banyard, David Hayman, Nicholas Johnson, Lorraine McElhinney, and Anthony R. Fooks

Postexposure Prophylaxis for Rabies in Resource-Limited/Poor Countries

Prapimporn Shantavasinkul and Henry Wilde

Neuroimaging in Rabies

Jiraporn Laothamatas, Witaya Sungkarat, and Thiravat Hemachudha

Rabies Virus Infection and MicroRNAs

Niran Israsena, Aekkapol Mahavithanakorn, and Thiravat Hemachudha

Design of Future Rabies Biologics and Antiviral Drugs

Todd G. Smith, Xianfu Wu, Richard Franka, and Charles E. Rupprecht

Therapy of Human Rabies

Alan C. Jackson

Mathematical Models for Rabies

Vijay G. Panjwani and Leslie A. Real

Evolution of Wildlife Rabies Control Tactics

Rick Rosatte

Understanding Effects of Barriers on the Spread and Control of Rabies

Erin E. Rees, Bruce A. Pond, Rowland R. Tinline, and Denise Bélanger

Rabies Research in Resource-Poor Countries

Henry Wilde and Boonlert Lumlerdacha



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